

Application No.: 10/739,439

Case No.: 58797US002

REMARKS

Claims 1 and 2 are amended. Claims 1-18 are pending.

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Interview Summary

The undersigned acknowledges with appreciation the in-person interview granted by the Examiner on August 9, 2005, wherein the contents of the Amendment and Response Under 37 CFR § 1.111 paper dated July 26, 2005 was discussed. In addition, the current amendments to claims 1 and 2 were also discussed in regard to the rejection based on U.S. Pat. Pub. No. US 2001/0030811 A1 (Kasai et al.).

Support for current amendments, which further distinguish the claims from '811 (Kasai et al.), can be found, for example, in the specification on page 18, lines 6-8 and 22-30. The phrase "wherein the Al_2O_3 and ZrO_2 are present in crystalline phases" was added based on a suggestion by the Examiner to make it clear that Al_2O_3 and ZrO_2 are present in crystalline phases. The phrase "wherein the transparent fused crystalline ceramic contains less than 10 percent by weight amorphous material" was added to provide further differentiation from '811 (Kasai et al.).

As stated in the Amendment and Response Under 37 CFR § 1.111 paper dated July 26, 2005, Paragraph 031 of '811 (Kasai et al.) states:

... As used herein "fused" beads refer to those that are prepared by a melt, as opposed to a sol-gel process. Such fused beads may be **completely amorphous (i.e., noncrystalline) or they may have crystalline and noncrystalline regions.** Upon initial formation from a melt, typically the beads are substantially amorphous (but can contain some crystallinity); however, upon further heat treatment, the beads can develop crystallinity in the form of a nanoscale glass ceramic microstructure (i.e., microstructure in which a significant volume fraction of crystals less than 100 nanometers in diameter has grown from within an initially amorphous structure). ... (underlining and bolding added)

It is understood by Applicants from the bold text above, that while the '811 (Kasai et al) beads are typically substantially amorphous, they can also have crystalline and noncrystalline (amorphous) regions, wherein if the latter is the case, the beads contain "some crystallinity".

It is submitted the addition of the phrase "wherein the transparent fused crystalline ceramic contains less than 10 percent by weight amorphous material" to claims 1 and 2 add even further differentiation from '811 (Kasai et al). More specifically, it is submitted that Applicants transparent fused crystalline ceramic, which can contain less than 10 (which includes have zero amorphous

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material) percent by weight amorphous material, contains significantly more crystalline material (i.e., greater than 90 percent by weight) than "some crystallinity" as reported in '811 (Kasai et al).

Further, as discussed in the Amendment and Response Under 37 CFR § 1.111 paper dated July 26, 2005, heat-treating amorphous material, as reported in '811 (Kasai et al), to develop crystallinity from the amorphous material is a fundamentally different process than obtaining crystalline material directly cooled from the melt, as required for Applicants' claimed invention. It is submitted that it is clear to one of ordinary skill in the art that the microstructures resulting from these different processes are significantly different, and readily distinguishable from each other.

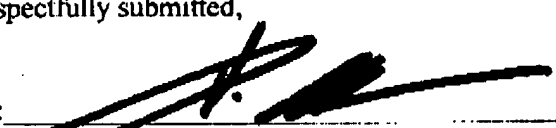
Claims 3-18 depend directly or indirectly from claim 2. Claim 2 is patentable, for example, for the reasons given above. Thus, claims 3-18 are also be patentable.

In view of the above, it is submitted that the application is in condition for allowance. Reconsideration of the application is requested.

Respectfully submitted,

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Date

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